



**Testimony of  
Mr. Mead Treadwell, Chairman  
U.S. Arctic Research Commission**

**National Academies of Science report on Federal icebreaking missions**

**Before the  
House Subcommittee on Coast Guard and Maritime Transportation**

**September 26, 2006**

Thank you, Mr. Chairman, for the opportunity to testify before the Subcommittee concerning the National Academies of Science report on Federal icebreaking missions and on the views of U.S. Arctic Research Commission (USARC) that address this important matter.

My name is Mead Treadwell and I am from Anchorage, Alaska. I have been a member of the U.S. Arctic Research Commission since 2001, and in August of this year, I was designated by President Bush to serve a three-year term as Chairman. I am a Senior Fellow at the Institute of the North, and Chairman and Chief Executive Officer of Venture Ad Astra, an Anchorage-based firm developing geospatial positioning and imaging technologies.

Before presenting my testimony, I'd like to dedicate my remarks to the two crew members of Coast Guard icebreaker *Healy* who died this summer in the conduct of Arctic Research, and to their families.

Before outlining the USARC's position on the importance of maintaining a fleet of federal icebreaking ships to the nation, I would like to compliment the National Academies of Science, and the Polar Research and Marine Boards, in particular, for their fine efforts in conducting this study on behalf of the nation. As this report has just been publicly released, we will require more time to study it, but based on our preliminary understanding, the USARC, which worked closely with the Polar Research Board in developing this study, supports its conclusions.

We also compliment the Coast Guard for conducting their study and for recognizing that such a federal fleet is essential. Many of their conclusions are in sync with those in National Academies report.

I am addressing you because the US is a polar country and we have been since 1867, and because we are a leading nation in Arctic research. The U.S. Arctic Research Commission was created in response to the passage of the Arctic Research and Policy Act of 1984. The primary duty of the Commission is to develop and recommend an integrated national Arctic research policy.

USARC cooperates with the Interagency Arctic Research Policy Committee to establish a national Arctic research program plan to implement the policy. In addition, the USARC facilitates cooperation among the Federal Government and state and local governments with respect to Arctic research; reviews Federal research programs in the Arctic and recommends improvements in coordination among programs; recommends methods to improve logistical planning and support for Arctic research; recommends methods for improving efficient sharing and dissemination of data and information about the Arctic among interested public and private institutions; cooperates with the Governor of the State of Alaska and with agencies and organizations of that State which the Governor may designate with respect to the formulation of Arctic research policy; recommends to the Interagency Committee the means for developing international scientific cooperation in the Arctic; and publishes a biennial statement of goals and objectives with respect to Arctic research to guide the Interagency Committee.

With respect to icebreakers and the Federal icebreaking mission, USARC works with other agencies, and the Arctic statute reads, “The Office of Management and Budget shall seek to facilitate planning for the design, procurement, maintenance, deployment, and operations of icebreakers needed to provide a platform for Arctic research by allocating all funds necessary to support icebreaking operations, except for recurring incremental costs associated with specific projects, to the Coast Guard.”

Over the past several years, the USARC has communicated to the President (see letter attached), to Congress, and to other entities, including the National Academies, the importance of maintaining a fleet of icebreaking vessels to the U.S., and is one of only eight Arctic nations, including Russia, Canada, Sweden, Norway, Denmark (Greenland), Iceland, and Finland. Alaska is our nation’s Arctic territory, and the gateway to the high north.

While scientific research may be our particular purview, we also recognize that such a fleet is a vital part of the nation’s strategic presence in the polar regions.

The Arctic environment is changing rapidly, as reported daily in the global press. Climate change is presenting both challenges and opportunities, such as improved prospects for research, enhanced access to natural resources, and favorable circumstances for marine transportation via previously ice-infested passageways and polar routes. These changes are not going unnoticed by our fellow Arctic nations, and activities ranging from scientific research to commercial development are increasing apace.

I would like to make these 4 specific points regarding the necessity of a Federal icebreaker fleet.

1. **Vital for scientific research.** Because icebreakers conduct operations in ice-covered waters that no other ships can perform, they are essential to the support of research in high latitudes, not only as research platforms, but also to enable access to and support of research facilities locked within permanent ice pack of the polar seas. Because the Coast Guard icebreakers are aging, the National Science Foundation has had little choice but to charter a Russian commercial icebreaker for Antarctic work, and a Swedish icebreaker is likely to be leased by NSF next year for work at both poles. Shouldn't a US federal icebreaker fleet be supporting our research and polar interests?
2. **National presence in polar waters.** US Coast Guard icebreakers maintain our national presence in both the Arctic and the Antarctic in support of the US policy in the Antarctic and our standing in the Antarctic Treaty organizations. Canada's Prime Minister, Stephen Harper, has become particularly vocal about sovereignty issues. He has proposed the purchase of three new heavy icebreakers to be based in a new port near Iqualuit, and the addition of 500 personnel in Canada's north. In a speech in Winnipeg last December 22, he said, "As Prime Minister, I will make it plain to foreign governments – including the United States – that naval vessels traveling in Canadian waters will require the consent of the government of Canada." (from "Breaking the Ice on Canada-U.S. Arctic Co-operation, by Franklyn Griffiths, *Globe and Mail*, February 22, 2006). We also need to consider our domestic waters in the great state of Alaska. Alaska's coastline constitutes roughly half of the nation's total. Enforcing the nation's laws and protecting the marine environment requires polar icebreakers. We also have a growing need for an oil spill response system in the Arctic, which requires icebreaker support.
3. **Marine access and shipping is increasing.** As waterways in the Arctic open up, due to the melting and retreat of sea ice, support of Arctic transportation (which shortens shipping distances and times, and are thus of significant economic interest) will become more important as will the nation's need to maintain freedom of navigation in these regions. As Arctic sea ice disappears during the summer months over the next 50 years, marine access will open up, and routes across the polar ocean could shorten the distance between Europe and Asia for commercial shipping. With this potential increase in Arctic shipping comes a greater US responsibility for environmental protection, search and rescue, navigation, safety, and overall security of the Bering Strait region and Alaska's coastal seas.
4. **Claims to extend US sovereignty in the Arctic.** Whether or not the US accedes to the Convention on the Law of the Sea, we must conduct surveys of our nation's extended continental shelf in order to support our claims of sovereignty. Many of these regions are rich in natural resources, and if they are to be developed, we will need to know definitively if these areas are part of the United States. Many regions requiring surveys are adjacent to Alaska, in ice-infested waters, accessible by icebreakers.

Of all the world's oceans, the Arctic Ocean is the last frontier, a *mare incognitum*. It's a demanding place, remote, and operations in this region are expensive. Nevertheless, due to a rapidly changing environment, the Arctic is a region of great opportunity. Access is improving, and will continue to do so. Nine out of ten people in the world live on the continents that surround the Arctic Ocean, which means this area will not go unnoticed in the 21<sup>st</sup> century.

An icebreaker fleet is a national asset and is an important element of broad national interest. A fleet is required to meet national needs in scientific research, national and homeland security, sustainable use of resources, maritime activity, and sovereignty. NSF's Dr. Bement cites a daily operational cost of \$100,000 for icebreaker *Healy*. This should be a challenge to all involved: what combination of crewing configuration, long-term maintenance, cost sharing on missions, and other factors may be called into play to reduce this figure?

In summary, the US cannot meet these needs with flags, rhetoric, outsourcing abroad, and public affairs campaigns. We require US ships in the sea and the missions they accomplish. Most of the vessels in the existing fleet are near, or at the end of their lifespan and refurbishment is not prudent. A new fleet of polar class icebreakers is required, and it must be a Federal fleet rather than one created entirely through private enterprise.

Thank you for the opportunity to speak with you today. I would be pleased to address any questions you may have.



## UNITED STATES ARCTIC RESEARCH COMMISSION

The Honorable George W. Bush  
President of the United States  
The White House  
1600 Pennsylvania Avenue, N.W.  
Washington, DC, 20500

9 February 2005  
USARC 05-07

Dear President Bush,

The icebreaker fleet operated by the US Coast Guard is a vital part of the nation's strategic presence in the Polar Regions. These ships conduct operations in the ice covered regions of the world's oceans that no other United States ships can perform. The Coast Guard Polar icebreakers are essential to the support of research in high latitudes, not only as research platforms, but to allow the support of research facilities inside the permanent ice pack of the polar seas. These ships also maintain our national presence in both the Arctic and the Antarctic including supporting the US policy in the Antarctic and our standing in the Antarctic Treaty organizations. As marine access changes in the Arctic, the support of Arctic transportation will become more important as will the nation's need to maintain freedom of navigation in these regions.

The capabilities of the Coast Guard icebreakers are essential for the surveys necessary for a US claim to extensions of our sovereignty in the Arctic under Article 76 of the UN Convention on the Law of the Sea and to enforce any requirements or regulations which the nation may decide to implement over this new national territory. Similarly, the Alaskan coastline is roughly half of the coastline of the entire country but cannot be properly safeguarded without the ability to operate in the region, an ability possessed only by Coast Guard icebreakers.

The Arctic environment is becoming less remote and future development activities will require the ability to respond at sea to such varied responsibilities as oil spill clean up and fisheries enforcement in the Arctic. In addition increasing access to the Arctic requires the capability for classic Coast Guard roles such as search and rescue and to ensure safety at sea.

Recent developments in the support of the Coast Guard's icebreaker fleet have caused concern within the U.S. Arctic Research Commission. We respectfully request that the future availability of the nation's capability for marine operations be carefully monitored and secured in order to preserve these essential capabilities.

Respectfully,

A handwritten signature in dark ink, appearing to read "George B. Newton".

George B. Newton  
Chair

US Arctic Research Commission

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